

**CONTROVERSY AND CHANGE
IN THE FIRE CODE ADOPTION PROCESS**

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Abstract

In 1995 the three major building code publishers in the United States, The Building Officials and Code Administrators International (BOCA), The International Conference of Building Officials (ICBO) and the Southern Building Code Congress (SBCCI) formed the International Code Council (ICC) with the intention of publishing a national building code. A companion document, a national fire code was also envisioned. The National Fire Protection Association (NFPA) joined in this fire code effort. In February of 1998, after publication of the first draft of the *International Fire Code 2000*, NFPA withdrew from the ICC development project. Since that time each group has made a number of public statements regarding the reason for this breakup. The purpose of this project was to investigate the root causes for the controversy and define the impact this division will have on the fire service in the United States. The issue became relevant for the writer in the fall of 1998 when Kentucky proposed replacing its BOCA code with a NFPA code. The primary source of information as to the true nature of the controversy has been drawn from personal interviews with some of the representatives of each of the national organizations as well as an analysis of press releases and periodical articles. Two case studies of recent maneuvering by both sides on the issue were included as illustrations. The end result has been to disprove the public statements and offer the theory that the true reason behind the controversy is the lack of dominance by the fire service in the generation of the fire code. A recommendation that an entity with sufficient national stature to compel the two sides to resolve their differences was also included.

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Introduction

The long standing association between the National Fire Protection Association (NFPA) and the three model code groups that currently publish building and fire codes in the United States has been dissolved over the past two years. This schism has an impact upon the fire service organizations in the United States who use fire codes and standards to reduce the threat of fire in their communities. The root causes of the conflict are difficult to define and analyze. The major groups cannot be described as acting irresponsibly. They have all stated their desire to cooperate and resolve their differences. Yet it hasn't happened and several indicators have recently appeared that indicate that it won't happen in the near future. The purpose of this study is to seek to identify the primary differences that currently exist and to predict the effect this conflict will have upon the American fire service in the code enforcement arena. Secondary to this primary focus will be an analysis of a movement, currently underway, by several states to select a new fire code. The lobbying by both sides during adoption procedures is a reflection of the base conflict and worthy of study. Research methodology will be primarily descriptive research. This is an emerging issue whose long term effect is still to be determined. The present status is in flux and literally changing every day. An attempt will also be made to define and examine the strong opinions being generated and strong positions being taken by fire code enforcement officials involved in this issue of change. The first research question asked must be "Is the fire code community in the United States truly divided on the issue of a national model fire code?" The second research question then will be; "What is the basis for the dissolution of the working relationship that has previously existed between the National Fire Protection Association, the Southern Code Conference International, the Building

Officials and Code Administrators inc., and the International Conference of Building Officials?” Finally the third question then must be asked does this conflict pose a problem for the national fire service?”

Background and Significance

The fire service has often been referred to as an organization determined to put itself out of business. This statement refers to a determination on the part of the fire service to primarily prevent fires and to place fire suppression in a secondary role. Fire Prevention is historically the oldest of the fire fighting efforts. Rome, for example, had fire prevention inspectors as early as 6 AD (Robertson, 1979) who were authorized to take measures to prevent fire including corporal punishment. In the introduction to chapter 11 of “America Burning” The Report of the National Commission on Fire Prevention and Control, (1973) the commission states that for centuries governments regulated building construction for fire safety. The report (1973) goes on to say that after a number of conflagrations at the beginning of the twenty-first century, fire codes became a matter of some importance in the United States. Changes and improvements to both the fire and building codes came as a result of spectacular fires and/or tragedies. The concept that governments should and can impose fire safety on private citizens and their property is a basic concept of a democratic government. (America Burning, 1973) For the purposes of this report the term used by NFPA to denote the government and/or governing body that enforces the fire code, “Authority Having Jurisdiction” (AHJ), will be used. NFPA (Peterson & Sawyer, 1998) defines the AHJ as the organization, office or individual responsible for approving

equipment, an installation or a procedure. Model codes and standards are published commercially by many organizations. There are basically three types of code and standard issuing organizations. The first are industry or self-regulating associations. These generally adopt voluntary standards to insure quality within their particular industry. A second type of group would be groups that attract a broad spectrum of membership based on interest in the groups particular focus. Environmental groups such as the Sierra club fall into this category as does NFPA. The third type of group would be a restricted membership such as the three model code groups whose membership is restricted to public officials whose duty is to legally enforce the codes they generate. Understanding the history of these organizations and their associated publications is crucial to understanding the conflict that currently exists. There are four major code issuing groups involved at the present time. A fifth group, the American Insurance Association no longer issues codes. The first, The National Fire Protection Association (NFPA) has already been mentioned. NFPA was formed in 1896 (Bryan & Picard 1979) to develop rules to govern automatic sprinklers for stock insurance companies. NFPA is described as a “private, voluntary, nonprofit, association whose activities, in addition to production of technical and professional standards, include information exchange, fire safety technical standards development, technical advisory services, public education, fire safety research, and services to public protection agencies. NFPA publishes a fire prevention code (NFPA #1) as well as a “Life Safety” code (NFPA #101). NFPA does not publish a building code.

There currently exist three major building code generating groups in the United States. Each group publishes a fire code as well. They are the Building Officials and Code Administrators, International (BOCA), the International Conference of Building Officials (ICBO) and

the Southern Building Code Congress (SBCC), (Bryan & Picard - 1979). While each of these groups is a separate entity, the introductory description of the BOCA organization drawn from the National Building Code (1999) is typical. BOCA describes itself as a “nonprofit member service organization dedicated to professional code administration and enforcement for the protection of public health, safety and welfare.” One aspect of these groups is the geographical distribution of their codes. BOCA originated in the Midwest and after AIA ceased publication inherited the Northeast. SBCCI is the dominate code in the South and its code is often mistitled as the “Southern” Building Code. ICBO publishes the Uniform Building Code that is the primary code in use in the Western States. A code map published by ICBO is attached as appendix A to this report.

In the Fall of 1998 Fire Departments throughout the commonwealth of Kentucky were notified by the State Fire Marshal’s Office (Walden, November 24, 1998)) that a proposal to adopt a new state fire code had been submitted. The new code was to be the NFPA #1 Fire Prevention Code 1997 edition. This adoption process also included NFPA #101, The Life Safety Code. Prior to this announcement the fire prevention code in use in Kentucky was entitled the “Kentucky Fire Prevention Code (Standards of Safety) 2nd edition (1996)”. This regulation was based on the BOCA national fire prevention code but had been extensively amended to include local options and some elements drawn from NFPA #101 for specific occupancies. This announcement generated several heated discussions among Kentucky Fire service leaders at gatherings attended by this writer. At a staff meeting of this writer’s own organization the local Fire Marshal voiced his adamant opposition to the proposal. The SFMO’s proposal clearly was creating a great deal of controversy within the code enforcement community in Kentucky. Since this writer had chosen to become an outspoken proponent of the code

change and given that others both within and external to the author's organization opposed the move, a clear understanding of this controversy was needed.

It is necessary at this point that the reader understand fire code adoption procedure. There are basically three ways to adopt a fire code in a State or community. The first way is to write a complete code in legislative text and adopt it as a law. This way is very time consuming and raises issues of validity and necessity for the code's requirements. A second method is to adopt a model code by amendment. In this process a model code's requirements are selectively adopted, using only those requirements that the adopting authority wishes to include. Kentucky used this method in the past code cycle to a limited extent. Its model code closely resemble the BOCA model code and, in fact, was published as a separate document by BOCA. The third method is to adopt "by incorporation by reference". In this method the adopting authority adopts a simple document that references the model code or standard that the community wishes to use as its own. This was the method proposed by the SFMO for Kentucky.

Yet another significant facet to the controversy was the conflict that was perceived to exist between new and existing buildings. Kentucky is what is referred to as a "mini-maxi" state. This refers to a legal requirement in some states that no local code or standard can exceed state wide requirements or be less than state requirements. This wording is applied to the building code at the state level. While the Kentucky fire code was seen as an extension of the BOCA building code, i.e. a "maintenance" code, this presented little or no problem. Adoption of a fire code divorced from a model building code, however, raised the issue of whether or not provisions of the code could be used in an existing (not new) building. Some argued that the "mini-maxi" concept

applied to the fire code as well. Others were of the opinion that a fire code was not constrained by this requirement. This issue becomes critical, for example, where the fire code requires that a building be sprinklered but the building code under which the building was constructed has no such requirement. With only the experience of a building code/fire code relationship to draw from, many fire service leaders were of the opinion that the proposed code change could not and would not work in Kentucky. This writer perceived the adoption process to be an exercise in the management of change at a state wide level. At the same time there existed the larger issue of the ongoing rift between NFPA and the ICC that was focusing on the adoption process in Kentucky.

In October of 1997 a first draft of a document entitled *International Fire Code 2000* was published (ICC, 1997). This draft resulted from an effort by the three model code groups and NFPA to draft a single model fire prevention code for the entire United States.

In February of 1998 NFPA withdrew from the International Code Conference's (ICC) development process. Subsequent to that withdrawal, a final draft of the 2000 edition of the IFC has been published (July 1998). NFPA has also announced its intent to publish a 2000 edition of its Fire Prevention Code (NFPA #!). In an article entitled "Another Strange Twist in the Road towards Unifying U.S. Model Fire Codes" that appeared in the October/November newsletter of the Steel Tank Institute, the Western Fire Chiefs announced they would also be issuing a 2000 edition of the "Uniform Fire Code" (UFC) that had formerly been a companion document to the Uniform Building Code" (UBC) issued by ICBO! (Tank Talk, October/November 1998) In that article Western Fire Chiefs president Jim Rankin is quoted as saying that: "It is now very clear that when the year 2000 rolls around, we will find nearly as many fire codes as we know today, and, with the edition

of the new IFC, possible even more.” With the above information as background the research question is validated. The problem then becomes one of defining the issues at work and predicting potential outcomes.

Literature Review

A literature review was conducted using the on-line services at the National Fire Academy’s Learning Resource Center with negative results. This issue apparently is too new and ongoing to have received sufficient attention to date. On-line services at the three model code groups and NFPA are available, however, and were accessed. Several articles have appeared in periodicals and were used in this report. Unfortunately all of these articles took one side or another and an impartial study of the effect and impact of the conflict does not seem to exist. Additionally all participants had prepared press releases covering aspects of the conflict as they occurred. Transcripts of testimony delivered in New Hampshire, Maryland and Kentucky during code adoption proceedings were also obtained through the office of the State Fire Marshal for each of those States. These transcripts were especially helpful in understanding the passion being generated by the various parties involved in this issue. Background information on the history of the different code organizations and their different publications is generally included on a frontispiece of every code published. Several of the texts referenced to describe the overall appearance of the American code community indicate that with the exception of the current controversy, code generation

in the United States has remained fairly stable for many years.

Procedures

In addition to a literature search and examination of the periodical index of several of the fire service publications, the primary methodology employed has been open ended personal interviews with key players from some of the referenced agencies. These interviews were deliberately unstructured so as to solicit the opinions and thinking of the participants. Those interviewed were Russell Sanders, Central Regional Officer for NFPA, Paul Heilstedt, Executive Director of BOCA International, Chief James Rankin, Western Fire Chiefs Association and Steven Sawyer, Fire service Section of NFPA. Each was first asked: “What in your opinion is the root cause of the current controversy between NFPA and the model code groups?” Each was then asked what if anything they would recommend to resolve the issue. Last each was asked what they thought was causing this controversy to be so heated? Interestingly enough, at some time during each of the interviews the interviewee requested not to be quoted or expressed opinion that was requested to be “off the record.” In all cases these requests were honored. There are also two case studies included in the discussion portion of this project. These case studies were selected to illustrate the ongoing conflict as it currently exists. Neither of the case studies has been resolved as of the date of this report. Both are in litigation and, according to those I spoke with, neither appears to be a candidate for an out of court settlement. A fourth approach was to actually participate in the debate over code selection associated with the code adoption process in this writer’s home State of Kentucky This writer requested to testify at a public hearing held in Frankfort Kentucky

in December of 1998 as a part of that state's adoption procedure. Hearing first hand the formal positions and sincere beliefs expressed by both local and national participants in the process made understanding of the entire issue possible.

Results

The original focus of this project was to determine if, in fact, a conflict existed in the fire code community and what the root causes of any such split were. At this point the complete breakdown has been well documented and commented on by both sides. The first research question "Is the fire code community in the United States truly divided on the issue of a national model fire code?" actually has been clarified by the publicity surrounding this issue. NFPA's position was stated in its newsletter "NFPA update" issue 827 (October/November 1998) where it said that the geographical areas of influence of the three model groups weakened their effectiveness but did not hinder NFPA. The ICC, on the other hand, has circulated a resolution to a number of code related groups calling for a single national set or family of codes. In the July 5, BOCA "Bulletin" lists over forty groups who have signed this resolution. Apparently the only single issue to which all parties can agree is that a single national model fire code is a desirable thing.

The second research question "What is the basis for the dissolution of the working relationship that had previously existed between NFPA, BOCA, ICBO and SBCCI?" is not as easily determined. Publically all parties agree that the most significant issue in dispute is the way that NFPA and the code

groups vote on proposed codes. NFPA membership is open to any interested party. The three code groups restrict voting rights to code enforcement officials. This fundamental difference in who participates in code development and promulgation is a major stumbling block between the involved parties. A common term that is continually mentioned, is “turf battle” meaning the parties in conflict do not want to yield any of their current influence in the process. Another reason is economics. Publishing rights to these codes forms a major part of each organization’s annual budget. Each group has a business plan that includes activities funded by publishing codes and standards. If the geographical and proprietary boundaries are dissolved someone is going to lose economically.

The real reason for the conflict is, in this writer’s opinion, more subtle. Hal Bruno’s editorial in “Firehouse” magazine (July 1998) expresses the opinion that the true reason behind the conflict is the inability of the fire service to establish a majority in the fire code development process. Building officials dominate the three code groups and committee makeup on the ICC reflects this domination. The philosophy of the building code groups is that a fire code is a maintenance code that supports a building code. Fire code officials maintain that fire codes are unique documents that stand alone and must apply to both new and existing buildings. Building officials will not yield their influence over the fire code and fire officials will not accept having elements of a code dictated to them by a group that they do not perceive as having the necessary level of expertise. Similar concerns were expressed verbally in several of the interviews conducted as a part of this research. Richard Schulte writing in the September issue of “Plumbing Engineer” (1998) supports this finding.

The third question: “Does this conflict pose a problem for the national fire service?” was asked

of each interviewee. The overwhelming answer was yes it does. Every editorial, interview and periodical article agreed that the conflict was a hindrance to resolving the fire problem in the United States.

Nowhere could this writer find even one opinion that a diversity of opinion or differing methods of articulating fire safety was a good thing. Everyone expressed regret that such a conflict had developed and a desire too see this issue resolved as soon as possible.

Discussion

As an introduction to a discussion of this project this writer has selected two case studies to illustrate the impact of the ongoing conflict:

Case Study #1:

In the first case study, The Western Fire Chief's Association (WFCA) has, for a number of years shared ownership of the Uniform Fire Code (UFC) in partnership with the International Conference of Building Officials (ICBO). As such, WFCA was able to participate in the International Fire Code development process as a full partner. In fact, ICBO had offered the UFC to the ICC as the framework for the IFC. According to WFCA president James Rankin, interviewed by phone in June of 1999, WFCA withdrew from the process when their statutory partnership in the ICC could no longer be guaranteed. WFCA then determined that their organization would continue to issue a UFC with the intention that the Fire Service continue to be a majority contributor in the model fire code generating process. Chief Rankin pointed out that twenty-eight states currently use the UFC. His

opinion is that much of the credibility associated with this code derives from the WFCA's authorship of the UFC. Since ICBO retains an equal share in the UFC, the end result of this case will be two codes based on the same original document bearing two different titles and edited and amended by two different groups. Despite these differences President Rankin has stated that the WFCA will continue to meet jointly with ICBO in an effort to resolve the conflict. He has also indicated that the WFCA is very interested in "harmonizing" the UFC with NFPA #1 and #101. Philosophically his group is not opposed to a single national fire code although he expressed concern that guarantees are needed to insure sufficient fire service representation on any code development group.

Case Study #2:

On March 24, 1999 ICC filed a trademark infringement complaint against NFPA. What makes this litigation interesting is the two press releases from NFPA and ICC and the different editorial slants taken by the two groups. In its "NFPA NEWS" volume 3. Number 4 (May 1999) NFPA states; "On the same day that the ICC submitted its response to the NFPA latest proposal for cooperative ICC/NFPA initiatives (March 24, 1999), the ICC also filed a lawsuit against NFPA in federal district court." the article then goes on to quote NFPA president George Miller who said: 'Obviously this action by ICC has regrettably made further negotiations between NFPA and ICC impossible.' ICC's press release as reported in the "ICC Info Online" dated April 13, 1999 states: 'In an effort to protect one of the ICC's most valuable assets, its family of "International Code" trademarks, ICC filed a trademark infringement complaint against NFPA on March 24, 1999.' ICC President Jon Traw stated "It was never the intent of ICC to terminate negotiations with the filing of this

trademark infringement complaint but merely a matter of protecting the future of our code documents.”

This new aspect to the dispute apparently centers around the NFPA’s use of the term “International” in marketing its “National Electrical Code” (NFPA #70) outside the United States. NFPA has published NFPA #70 for eighty-eight years and it is a standard reference in the electrical industry. When publishing the code in other languages it entitled the NEC as ‘International’ The ICC does not publish an electrical code but has trademarks on a “family” of codes entitled “International”. ICC Board Chairman Mike Perrone is also quoted in the ICC release (April 1999) as saying: “It is unfortunate that NFPA has chosen to terminate negotiations for cooperative efforts because of a dispute over the infringement of an ICC trademark.” NFPA Board Chair Herman Brice is quoted in the NFPA release (May 1999) as saying “The officers of the NFPA board are convinced that the ICC no longer wishes to work with NFPA to find common ground.” As stated at the beginning of the section the purpose of these two case studies is to illuminated the depth of the dispute. It is very clear that a great many people are affected by the conflict. Having witnessed first hand the heated discussions generated in Frankfort Kentucky during that State’s adoption process, this writer is convinced that, without intervention by a third party, resolution in this matter will be very difficult if not impossible.

Wading through all of the rhetoric in an attempt to discern why people normally sharing similar goals and objectives are so heated on this subject is difficult at best. This writer interviewed Paul Heilstedt, P.E. executive director of BOCA. He felt that some of the passion being generated resulted from personalities. He also stated that he felt that NFPA in some way felt threatened by the merging of the three model groups and the true nationwide organization that this merger created. NFPA officials, on

the other hand, point to the limited participation allowed to non-code enforcement fire safety experts as a fundamental problem in national fire code promulgation.

In order to better illustrate the attempts by both sides to “sell” their position to the public this writer has included two documents as appendix B to this report. BOCA’s publication entitled “The BOCA National Fire Prevention Code or NFPA 1 ? You Do Have a Choice! And NFPA’s “NFPA 1 A Fire Code for the United States and the World.” These are clearly documents especially prepared to address the ongoing conflict and each makes a very persuasive case for its position. In this writer’s opinion each also contains statements that can only be described as misleading. Yet their very existence provides proof that each of the code generating groups perceives the current controversy as a threat to their position in the national code community. Marketing the group’s product has suddenly become a vital issue. In fact each group appears to be seeking dominance in the code market where formerly the geographic boundaries had been faithfully observed. This desire to secure a large a portion of the market share as possible was also mentioned as a part of the business plans of the WFC in “harmonizing” its UFC with NFPA #1. Such a merger would result in approximately thirty-eight states using these two documents based on current usage. It is entirely possible that a merging of these two codes would then result in making the ICC’s code a minority product in the United States. At the same time the ICC’s building code clearly will be the majority code in use in the United States after the year 2000. As state and local governments seek to keep their adopted codes current the three older codes will gradually disappear. In short, the stage is set for an even greater code battle than is currently underway.

Recommendations

The fire problem in the United States is well documented. A continued split among the major groups who create the model codes and standards necessary to reduce this problem cannot be allowed to continue. The recommendation must be that this issue be resolved. The question is how. This writer suggests that third party intervention be employed to create an atmosphere where compromise and consensus is possible. The International Association of Fire Chiefs has already attempted to serve in this capacity without success. Unfortunately there are few national organizations with sufficient stature to force these groups to the table. This writer suggests that the Congressional Fire Service Institute with its ties to the Federal Government might be an ideal organization to act as the mediator in this dispute. Certainly it would be difficult for the involved parties to refuse a congressional delegation seeking a solution. Another group who might also serve would be the American National Standards Institute (ANSI). This consensus group assures both process and content of model codes and standards meet criteria necessary to be valid. Having an ANSI label attached to NFPA standards was a great success for that organization. ANSI would also have that necessary stature to bring all, sides to the table. Clearly this issue is important. With effective dates of 2000 all of these codes and standards need to be ready very soon. At the same time it is necessary to insure that internal fighting does not invalidate all of the codes leaving local code enforcement officials without the tools necessary to do the job of insuring fire, life and property safety in the United States into the next millennium.

References

- BOCA, (1998), The BOCA National Fire Prevention Code or NFPA 1 - You Do Have A Choice!.Country Club Hills, IL. BOCA
- BOCA, (July 5, 1999) Membership Memorandum, BOCA Bulletin, Country Club Hills, IL
- Bruno, Hal. (July, 1998) Battling Over the Code Process. FireHouse. Melville, NY
- Bryan, John L. & Picard, Raymond C. (1979) Managing Fire Services. Washington D.C. International City Managers Association
- International Code Council. (1998) International Fire Code 2000. Falls Church VA. ICC
- International Code Council. (April 13, 1998) ICC Trademark Infringement Complaint Filed Against NFPA. ICC INFO ONLINE available [HTTP://Codes.ICBO.ORG](http://Codes.ICBO.ORG)
- National Commission on Fire Prevention and Control. (1973) America Burning Washington D.C. Government Printing Office
- National Fire Protection Association (October/November 1998) NFPA Defends Democratic Process. NFPA UPDATE Quincy, MA Issue 827
- Robertson, James C. (1979) Introduction to Fire Prevention 2nd ed. Encino CA. Glencoe Publishing.
- Sawyer, Steven & Peterson, Ronald (1998) NFPA Fire Prevention Code Handbook Quincy, MA. NFPA
- Schulte, Richard C. (September 1998) Performance Codes, Plumbing Engineer, Evanston, IL
- Steel Tank Institute, (October/November 1998) Tank Talk Lake Zurich IL, Vol. 13 #5
- Walden, Judith G., editor, (1996) The Kentucky Fire Prevention Code (Standards of Safety) Frankfort, KY. Department of Housing, Buildings and Construction.

Appendices

Appendix A Building Code Distribution Map

Appendix B Persuasive Pamphlet by BOCA

Appendix C Persuasive Pamphlet by NFPA